

## **FISHERMEN CONSTRAINTS IN MARINE FISHERIES AT**

### **THERESPURAM- AN ANALYSIS**

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#### **ABSTRACT**

India plays pivotal role in marine capture fisheries. Tamil Nadu is one of the major coastal states in India. Thoothukudi is one of the main coastal districts in Tamil Nadu for deep sea fishing which has a coastal length of 140 km. The study has been conducted in Therespuram fishing village in Thoothukudi. 40 respondents were selected for the study of an analyses the fishermen constraints during marine capture fishing and ban period and also find major reason of debt to fishermen by Garret' ranking technique. The result of the study revealed that high fishing expanses, co-workers problems, in- efficient of society are the main constraints in marine capture fishing. During ban period, poverty, un-employment, and lack of credit are the major constraints to the fishermen. Major reason for debt was purchasing of craft, instruments, and maintains. If government provides alternative employment to fisherfolk it helps to minimize the fishing effort, alleviate the poverty and also overcome from the constraints of high fishing expanses. Implementation of effective co-operative society and fishermen association in this village it helps to minimize the co-workers problem to the fishermen.

**KEYWORDS:** Marine Capture Fishing, Ban Period, Constraints

#### **INTRODUCTION**

Fisheries play an important role in the Indian economy. It contributes to the national income, export, food and nutritional security and in employment generation. Thus, marine fisheries has high potential for rural development (Zancharia and Najmudeen, 2012). Tamil Nadu has a coastal length of 1076 km (13% of the countries coast line) 0.19 million sq.km of EEZ (9.4% of the India's EEZ) and a continental shelf of about 41,412 sq.km. and it's is one of the leading state in marine fish production. The marine fisheries potential of the state is estimated at 0.719 million tonnes (0.369 million tonnes from less than 50mt. depth and 0.35 million tonnes beyond 50 mt. depth (Mohamad and Vivekanandan, 2011). Thoothukudi is one of the main coastal district of Tamil Nadu for deep sea fishing which has a coastal length of 140km. there are 450 mechanized craft, 1300 vallams and 900 catamarans in this district and 5,428 fishermen families (Aruloli and Jeevitha, 2002). Therespuram fishing village are east in east coast of Thoothukudi. Mechanized and motorized crafts were operated in this village.

#### **OBJECTIVE**

Objective of the study analyses of fishermen constraints during marine capture fishing and ban period and also find the reason for debt to the fishermen, at Tharuvaikulam, Thoothukudi, Tamil Nadu.

## MATERIALS AND METHODS

The study has been conducted through survey method in Therespuram fishing village. 40 respondents were selected by random sampling technique for the study. The fishermen constraints during marine capture fishing and ban period and also find major reason for debt, were analyzed by Garratt ranking technique. The data obtained from the respondents were systematically tabulated for the purpose of analysis garret ranking technique was used to identify and rank the attributes on the fishermen constraints. Garret's ranking technique provides the change of orders into numerical scores. The prime advantage of this technique over simple frequency distribution is that the reasons and factors are arranged based on their importance from the point of view of respondents. The per cent position of each rank was converted into scores referring to the table given by Garret and Woodworth (1969). Garret's formula for converting ranks into percent is given below:

$$\text{Percent position} = 100 \times \frac{R_{ij} - 0.5}{N_j}$$

Where,

$R_{ij}$  = Rank given for  $i$ th factor by  $j$ th individual

$N_j$  = Number of factors ranked by  $j$ th individual

For each factor or problem, the scores of the individual respondents were added together and divided by the total number of respondents who gave scores and thus based on the mean scores, the and were given. These mean scores for all the factors were arranged in descending order and the most important factor was ranked first and the least important problem was ranked as the last

## RESULT AND DISCUSSIONS

Marine capture fishing is the major livelihood option for the people of this village. From table 1 it was obvious that fishermen ranked fishing expanses, co-workers problem and in-efficient of society are the major constraints in marine capture fishing. Since the study area was unhygienic fish landing centre in Thoothukudi district. For that reason fishermen get lesser prices for their catch. Creating awareness about hygienic handling of the fish catch will helps to get better price for catch. Bajus, *et al.*, (2010) reported that tuna long line comparative advantages are better price realization for the catch, lower cost maintenance of the gear system. Therefore conversion of tuna long line was the best option for the reducing fishing expanses. Hence to protect the interest of both producers and consumers it is essential to introduce and expand the cooperative fish marketing system throughout the country (Sathiadhas, *etal.*, 1997). Introduction of cooperative society and fishermen association in study area will helps to minimize the co-workers problems.

**Table 1: Marine Fishing Constrains in Therespuram**

S. No	Factors	Mean Score	Rank
1	High fishing expanses	82.10	I
2	Co-workers problems	58.95	II
3	In-efficient of society	56.80	III
4	Increase in the number of crafts	53.35	IV
5	Middlemen interference	52.78	V
6	Declining fish catch	47.23	VI
7	Lack of fixed assets	47.00	VII
8	Lack of basic facilities	44.18	VIII

Table 1: Contd.,			
9	Lack of craft berthing facilities	44.13	IX
10	Fishing organization related problems	42.83	X

*Source: Field Survey, 2015*

During ban period poverty was most vital constraints felt by the fishermen who were ranked first with the mean score of 98.2 (table 2) respectively lack of saving behavior of fishermen. Normally a fisherman has poor income with that situation employment also not available during ban period which leads to poverty. According to Salim (2007) studied on monsoon trawl ban and its effects on the livelihood of trawl laborers. His study explained poverty is the least affected problem, due to the payments obtained from the agricultural sector for labour but in present study explain poverty is first constraint due to alternative livelihood for fishermen.

**Table 2: Problems of Fishermen during Ban Periods**

S. No	Factors	Mean Score	Rank
1	Poverty	98.2	I
2	Un-employment	83.6	II
3	Lack of credit	82.1	III
4	Lack of government support	50.7	IV
5	Low wage	50.7	IV
6	Seasonal employment	12.9	VI

*Sources: Field Survey, 2015*

Un-employment and lack of credit also major constraints which ranked second and third with the mean score of 83.6 and 82.1. In the study area main livelihood for fishermen is marine capture fishing by using mechanized boat among that employment also not available thus unemployment was one of the major constraints. Normally during ban period, fishermen repair the craft and gear accordingly needs credit and also it leads to constraints of lack of credit. The fisherfolk are engaged in different livelihood options like construction work, net making and petty business activities during the ban period (Vivekanandhan, *et al.*, 2010). So alternative livelihood or seasonal employment recommended for overcome from ban period constraints.

The fishermen of our coastal villages borrower year after year and is heavily indebted. However he is not in a position to clear off the debts either because the loans are larger or his income is not enough to pay off his debts. Therefore the debt of the fishermen goes on increasing. This may be termed as coastal rural indebtedness.

**Table 3: Reason for Debt**

S. NO	Factors	Mean Score	Rank
1	Purchase craft	80.53	I
2	Craft maintains	68.43	II
3	Craft instruments purchasing	58.95	III
4	Festivals	46.13	IV
5	Household expanses	54.33	V
6	Education and health	47.80	VI
7	House construction	37.25	VII
8	Loan repayment	33.43	VIII
9	Social obligations	23.18	IX

*Source: Field survey, 2015*

The major cause of debt was purchase boat, craft maintains and craft instrument purchasing. Pannikar (1980) reported that 24.8 % of the total debt is utilized for productive purposes. Vipinkumar *et al.*, reported that 48.3 % of loans

were used for purchase of craft/ gear and other fishing related equipments in marine capture fishing. The fishermen are not in general benefited by institutional credit agencies. Commercial banks generally do not provide credit to fishermen of the plea that they don't have any valuable assets to show as security. They need credit support from the government for managing the capital cost for fishing and other huge credit require activities. It will be helps to reduce the burden of indebt of fishermen.

## CONCLUSIONS

Alternative livelihood to fisherfolk is helps to reduce fishing effort and increasing fish catch and also help to overcome the constraints of high fishing expanses. Effective co-operative society need for solve the co-workers problem and other needs. During marine fishing ban period, government provides seasonal employment to fisherfolk is helps to alleviate poverty and reduce the problems during fishing ban period. Inland fisheries provide regular employment for millions of poor people and seasonal or part time employment for many more. In case of marine fisheries sector, small scale sea cage farming, seaweed farming, lobster and crab fattening, oyster farming, etc., recommend for alternative livelihood to fisherfolk. It helps to reduce the fishing pressure and increasing fish catch in sea. It will help to reduce the borrowing money from the money lenders for fishermen. Creating awareness about saving through the extension programme will give effective result in fishermen credit.

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